## PRECIPITATION

There was heavy precipitation during the first week of October over nearly all of Texas and considerable over the Plains region and most of Wyoming, Arkansas, and western Louisiana. During the second week there was much better distribution, with moderately large falls in portions of the Southeast and the near Southwest, and of the Plateau and Pacific coast regions, also in the vicinity of Lake Michigan. From the middle of October onward to the end there usually was less precipitation than during the first fortnight, yet considerable occurred in the Pacific Northwest, in the west Gulf region and near Southwest, in the Northeast, and just before the month closed, from southeastern Louisiana to southern Virginia.

The month brought much more than October's normal precipitation to the Plains region, especially the western portion, and to practically all parts of Texas. There was usually somewhat more than normal in eastern Idaho, Wyoming, and southern and western Montana, also in Arkansas and Louisiana. Most other districts west of the Mississippi River received less than normal, especially California, southern Oregon and Arizona, and the middle Missouri Valley.

East of the Mississippi River almost every State averaged drier than normal, with notable shortages in the Ohio Valley and from Pennsylvania southwestward over the southern Appalachians. There was somewhat more than normal in certain parts of the Southeast, in some New England coast districts, and in northern Illinois.

## SNOWFALL

October brought comparatively little snowfall, considering the country as a whole.

In the southernmost States of the far West, even the loftiest stations had but scanty snowfall, but most high-land stations of Washington, of the middle and northern Plateau, and of the middle and northern Rocky Mountain region had moderate amounts.

From northeastern Washington eastward to Montana and southeastward to central Nebraska there was a considerable fall for October about the 14th to 18th.

From northern Minnesota eastward to the Adirondack region considerable snow occurred about the 16th to 20th, with notably heavy falls over the northern half of Michigan on the 17th and 18th.

Northern New England was visited by a moderately heavy snowstorm about the 24th, and most of Iowa and eastern Nebraska, with some portions of adjoining States, by a moderate fall on the 29th and 30th.

## SUNSHINE AND RELATIVE HUMIDITY

Much cloudy weather prevailed in the northern border States, but generally the southern two-thirds of the country, except the Florida Peninsula and southern Texas, had a large amount of sunshine, and the southern half of the Rocky Mountains and westward to the Pacific had considerably more than the average, while southwestern Arizona and southeastern California received from 90 to 97 per cent of the possible.

The relative humidities were generally below the normal in the Mississippi Valley and eastward as far north as the lower Lake region and southern portions of New York and the New England States; also in the Pacific States and far Southwest they were below the average. Elsewhere the humidities were generally above the normal, but with no unusual departures therefrom.

## SEVERE LOCAL STORMS, OCTOBER, 1930

[The table herewith contains such data as have been received concerning severe local storms that occurred during the month. A more complete statement will appear in the Annual Report of the Chief of Bureau]

Place	Date 3	Time	Width of path yards 1	Loss of life	Value of property destroyed	Character of storm  Destructive hail	Remarks  No details reported	Authority	
Elk Creek, Colo									J. S. Weather Bu
Forest District, N. Mex		P. m	2–4 mi.		\$5,000	Hail	Crops and buildings damaged; stock injured	reau. Do.	
Opelousas, La	7	8:30 a. m	100		30,000		Cotton compress demolished; several houses damaged; path 200 yards.	Do.	
Yakima and Spokane	14					Wind	Apples blown off	Do.	
Counties, Wash. Field, N. Mex. (near)	15		3-4 mi.		5,000	Hail	Crops and buildings damaged; stock hurt	Do.	
New Burnside, Ill	16					Wind and elec-	Several small buildings blown down; a house	Do.	
Buffalo, N. Y., to Erie, Pa.	18-19		  - <u>-</u>			trical. Snow	damaged; and a cow killed. Highways obstructed; apple trees broken; tele-	Do.	
				}			phone and power lines down in places; trans- portation lines hampered; roofs collapsed.		
Roswell, N. Mex. (22 miles	1	1-2 a. m				Hail.	Cotton and apples severely damaged.	Do.	
southeast)	,	D	0:		07.000	do	Crops and fruit damaged; sheep and goats killed	Do.	
Hope, N. Mex	1	P. m	2 mi.		27,000		or injured; roofs pierced.	10.	
Roswell, N. Mex	1	do	1, 760- 2, 640		90, 000	do	Cotton and alfalfa beaten, windows broken, buildings damaged, car tops perforated.	Do.	
Carlsbad, N. Mex	1-2	 				Hail and rain	Heavy damage to crops, houses and trees	Do.	
Pennington, N. Mex						Hail	Crops and other property damaged; stock injured	Do.	
Fowler, Colo. (near)	2	3 p. m	880	3	30, 000	Tornado and hail.	Houses, farm buildings and equipment and 3 autos totally wrecked; 3 persons injured.	Do.	
Peetz, Colo,	2	5:30 p. m	9 mi.			Hail	Windows and roofs pierced.	Do.	
Atoka, N. Mex	$ar{2}$	P. m	1–2 mi.				Crops ruined; roofs and autos damaged; stock injured.	Do.	
Parker, Colo.	3	3-3:15 p.m.	8 mi.	l		Hail		Do.	
Bvers, Colo	3	5:30 p. m				do	Stock injured: poultry killed	Do.	
Artesia and Stead, N. Mex.	3	P. m					Extensive crop loss; other property damage	Do.	

<sup>1 &</sup>quot;Mi," signifies miles instead of yards,